

**CLAIMS**

*Sub A37*

1. A substrate processing apparatus for providing predetermined processing to substrates brought from a load port door, comprising:

    a load port table on which a wafer carrier that accommodates a plurality of said substrates at the front of said load port door, and

    a shield plate provided so as to surround said load port table.

2. The substrate processing apparatus according to claim 1, wherein

    said wafer carrier is brought in and out of said load port table by a conveyer means, and

    said conveyer means brings said wafer carrier in and out of said load port table by ascending and descending said wafer carrier within a region surrounded by said shield plate.

3. The substrate processing apparatus according to claim 2, further comprising:

    a door that can be opened or closed provided on said shield plate, and

a lock mechanism for holding said door in a closed state,  
wherein

said door is maintained in the closed state thereof by making  
said lock mechanism function when said wafer carrier is brought  
in and out of said load port table by said conveyer means.

4. The substrate processing apparatus according to claim 3,  
wherein

said door is maintained in the closed state thereof when  
said wafer carrier brought from another processing apparatus  
arrives above said load port table.

5. A substrate processing system having a plurality of substrate  
processing apparatuses for providing predetermined processing  
to substrates brought from a load port door, connected through  
conveyer means, wherein:

each of said substrate processing apparatuses comprises a  
load port table on which a wafer carrier that accommodates a  
plurality of said substrates at the front of said load port door,  
a shield plate provided so as to surround said load port table,  
and a door that can be opened or closed provided on said shield  
plate, and

said door of specified substrate processing apparatus is  
maintained in the closed state thereof at the time when said

substrate processing apparatus to which said wafer carrier is conveyed is specified.

6. A substrate processing system having a plurality of substrate processing apparatuses for providing predetermined processing to substrates brought from a load port door, connected through conveyer means, wherein:

each of said substrate processing apparatuses comprises a load port table on which a wafer carrier that accommodates a plurality of said substrates at the front of said load port door, a shield plate provided so as to surround said load port table, and a door that can be opened or closed provided on said shield plate, and

said door of specified substrate processing apparatus is maintained in the closed state thereof at the time when said wafer carrier conveyed by said conveyer means arrives above said load port table of said specified substrate processing apparatus.

7. A method for conveying substrates utilizing a substrate processing system wherein a plurality of substrate processing apparatuses having a load port table surrounded by a shield plate comprising a door that can be opened or closed, connected through conveyer means, and a wafer carrier that accommodates a plurality of substrates is ascended or descended to bring said wafer carrier

to or out of said load port table of each substrate processing apparatus, wherein:

    said door is maintained in the closed state thereof when said wafer carrier is brought in or out of said load port table using said conveyer means.

*A3*  
8. The method for conveying substrates according to claim 7, wherein said door is maintained in the closed state thereof at the time when said substrate processing apparatus to which said wafer carrier is conveyed is specified.

9. The method for conveying substrates according to claim 7, wherein said door is maintained in the closed state thereof at the time when said wafer carrier conveyed by said conveyer means arrives above said load port table of specified substrate processing apparatus.